



Certificate Number: Q10561



Certificate Number: E17276

CN18A - CN18M

PRV : 50 - 1000 Volts

Io : 18 Amperes

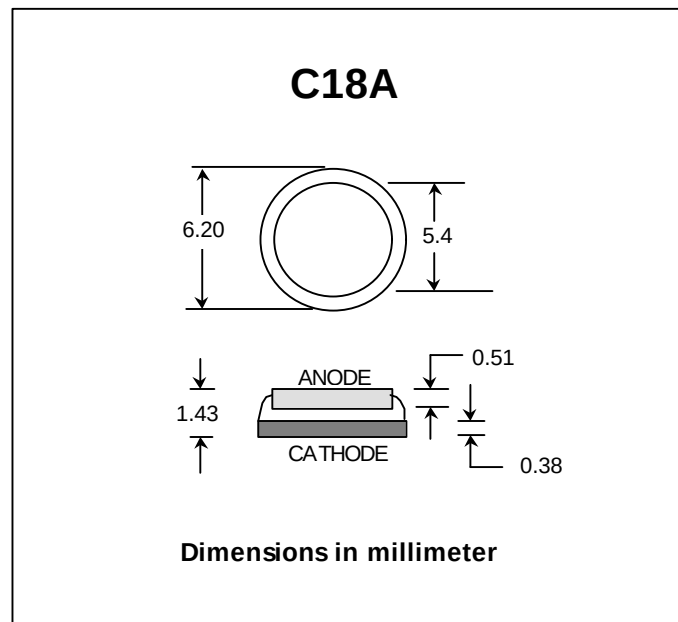
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Chip form

MECHANICAL DATA :

- * Case : C18A
- * Terminals : Solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Cathode to bigger size slug, For Anode to bigger size slug use "R" suffix.
- * Mounting position : Any
- * Weight : 0.29 gram

CELL RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	SYMBOL	CN18A	CN18B	CN18D	CN18G	CN18J	CN18K	CN18M	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Current $T_c = 75^\circ C$	$I_{F(AV)}$	18							Amps
Peak Forward Surge Current Single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							Amps
Maximum Forward Voltage at $I_F = 18$ Amps.	V_F	1.1							Volts
Maximum DC Reverse Current $T_a = 25^\circ C$ at rated DC Blocking Voltage $T_a = 100^\circ C$	I_R	5.0							μA
	$I_{R(H)}$	1.0							mA
Typical Junction Capacitance (Note 1)	C_J	300							pF
Thermal Resistance, Junction to Case	$R_{\theta JC}$	10							$^\circ C/W$
Junction Temperature Range	T_J	- 65 to + 175							$^\circ C$
Storage Temperature Range	T_{STG}	- 65 to + 175							$^\circ C$

Note : (1) Measured at 1.0 MHz and applied reverse Voltage of 4.0 V_{DC}

UPDATE : APRIL 23, 1998

RATING AND CHARACTERISTIC CURVES (CN18A - CN18M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

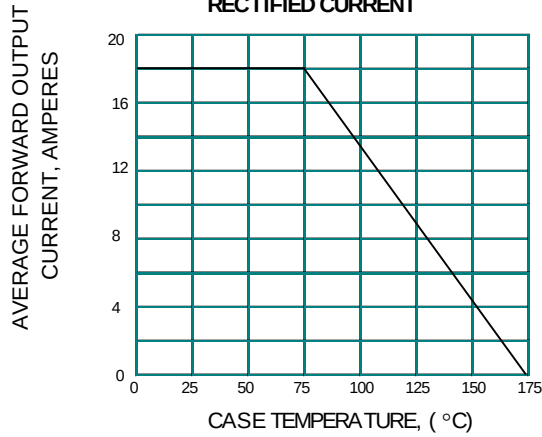


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

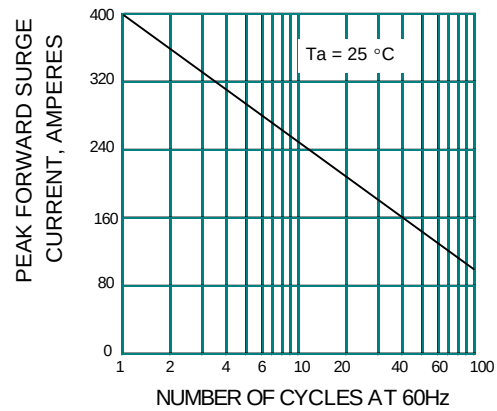


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

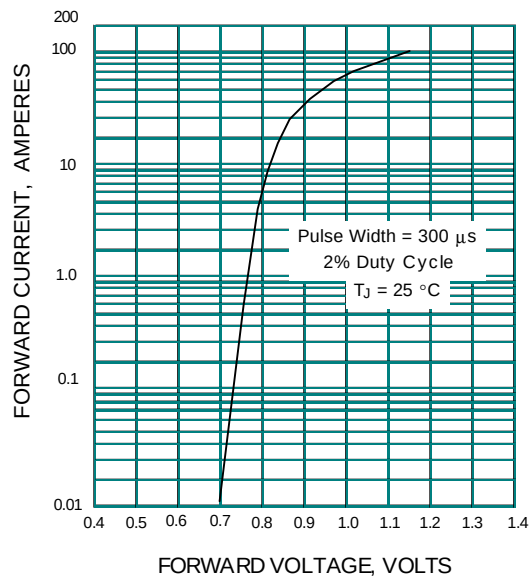


FIG 4 . - TYPICAL JUNCTION CAPACITANCE

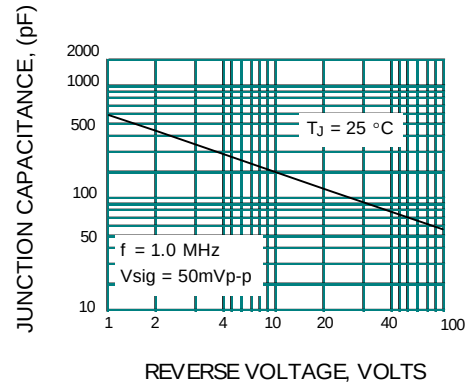


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

